

Avoid Verbal Orders

TO: TA-B3C/Keith Britton

DATE: 9/9/2009

FROM: TA-B1C/NEPA Compliance

SUBJECT KSC Record of Environmental Consideration (REC)

CHECKLIST #: 7614

1. PROJECT INFORMATION

Project Title: Upgrades to Launch Complex 40, CCAFS

Project Lead: Keith Britton, TA-B3C, 867-1955

Directorate Project No.: 98818

EPB Reviewer: LPH

Facility No.: LC40

2. NEPA DETERMINATIONS

- ☒ a. **Categorical Exclusion per 14 CFR Part 1216.305(d)**
- ☐ b. **Environmental Assessment (EA) Required per KNPR 8500.1**
- ☐ c. **Environmental Impact Statement (EIS) Required per KNPR 8500.1**
- ☒ d. **Project on CCAFS:**

3. ENVIRONMENTAL REQUIREMENTS

- a. **Non-Permit Requirements** ☒ **YES** ☐ **NO**
- b. **Permit Requirements** ☒ **YES** ☐ **NO**

The NASA Environmental Management Branch (TA-B1C) has assigned Lisa Ruffe, IHA-200, 867-6694 as the Environmental Point Of Contact (EPOC) for this project. Please add Ms. Ruffe's name to any lists or notifications of meetings related to this project. All questions relating to environmental issues should be forwarded to the EPOC section within the NASA Environmental Management Branch.

AF FORM 813: This project is located on CCAFS property. Coordination with the 45th CES/CEVP is required. AF Form 813 must be completed for project review by the Air Force. Contact Dale Hawkins (853-0960, 45 CES/CEAO) if clarification is required.

3.a.1. **HAZARDOUS/NON-HAZARDOUS WASTE:** All hazardous waste and non-hazardous wastes generated on KSC must be managed, controlled and disposed of per the KSC Waste Management requirements outlined in KNPR 8500.1. A Process Waste Questionnaire (PWQ), KSC Form 26-551 along with any supporting documentation (MSDS, product formulation, lab analyses) must be submitted to the IHA Waste Management Office for each waste stream generated. That office will then generate a Technical Response Package (TRP) which will give direction on proper handling, storage, and disposal of the waste stream. Please contact IHA Waste Management Services at 867-8640 if assistance is required.

3.a.2. **HAZARDOUS AND CONTROLLED WASTE (ASBESTOS CONTAINING MATERIAL):** This is a regulated substance that can no longer be used in construction materials. Asbestos was incorporated into many building products and most commonly found in floor tiles, roofing materials, caulking compounds, and insulation media. If asbestos will be disturbed, regulations from 62-257 F.A.C. must be followed and notification to the NASA Environmental Assurance Branch (Christine Vanaman, IHA-200, 867-3586) is required for any regulated asbestos removal in order that annual reporting requirements are fulfilled. If less than 260 linear feet, or less than 160 square feet of regulated asbestos containing material (RACM) is to be removed, there are no fee or reporting requirements to the FDEP, unless there is demolition of any load-supporting structural member. If the removal trips these thresholds, or is greater than 1 cubic meter, or 35 cubic feet, regulations require notification to FDEP. The "Notice of Asbestos Renovation or Demolition" (DEP Form Number 62-257.900(1)) can be found on the FDEP website under "Asbestos Notification" at: <http://www.dep.state.fl.us/air/forms.htm>. The Permitting and Compliance Group within TA-B1B Environmental Assurance Branch must be copied on all reports submitted to FDEP. For asbestos disposal, IHA Waste Management can supply directions on proper handling, storage, and disposal of the waste stream through the Process Waste Questionnaire/Technical Response Package (PWQ/TRP) process. Please contact IHA Waste Management Services at 867-8642 for assistance.

3.a.3. **HAZARDOUS AND CONTROLLED WASTE (PAINT):** This project will involve the application of paint coatings. All practical precautions must be taken to eliminate the possibility of a release of material or waste into the environment (primers/paints) from the paint surface preparation and painting operation. Paint chips, rust, debris, blast media,

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wastewater, etc. generated during preparation of surfaces will be contained and disposed of according to waste management guidelines given above in Item 3.a.1. Please contact IHA Waste Management Services at 867-8640 for assistance.

3.a.4. PAINT DISTURBANCE/REMOVAL: This project will involve disturbance/removal of paint coatings. Unless known to be non-hazardous, the coatings must be sampled and analyzed for the 8 RCRA hazardous metals (Ag, As, Ba, Cd, Cr, Hg, Pb, and Se). Analysis should be performed by an AIHA certified laboratory. The requirements established in OSHA standards 29 CFR 1926.62 & 29 CFR 1926.1127 for lead and cadmium respectively must be complied with if lead and/or cadmium are present. If the coatings contain heavy metals, it is recommended that the control zone and personal protective equipment requirements established in the lead standard be complied with to prevent exposure to workers and adjacent unprotected areas. The sampling analysis will dictate the level of PPE required and the handling/disposal requirements. If you have questions about PPE requirements call John Sherwood, IHA-022, at 867-1210. Paint chips, rust, debris, blast media, etc. generated during preparation of surfaces will be contained and disposed of according to waste management guidelines given above in Item 3.a.1.

Recycling of painted materials: Painted non oil-filled electrical equipment and other painted materials may go to the KSC Reutilization, Recycling, and Marketing Facility (RRMF) or taken off KSC for salvage by a contractor if PCBs are <50 ppm. Oil-filled and grease or oil-contacted equipment with PCB concentrations <50 ppm in the oil and in the paint on the equipment may go to the contractor or the RRMF for reuse. There is no requirement for TCLP analysis on items to be reused.

Disposal of painted materials:

Painted construction and demolition waste items will be accepted at the KSC Class III Landfill without PCB or TCLP analysis. The landfill will accept PCB bulk product waste (PCBs >50 ppm). See Item 3.a.5 for PCB bulk product waste storage requirements. Oil-filled and grease or oil-contacted equipment is not allowed at the landfill. For additional information contact John Matthews, TA-B1B, at 867-2943.

3.a.5. HAZARDOUS AND CONTROLLED WASTE (POLYCHLORINATED BIPHENYLS): Oil-filled equipment with oil containing PCBs >50 ppm must be managed through the PWQ/TRP process. If PCB concentration of paint on the equipment is <50 ppm, and PCBs in the oil are <50 ppm, the equipment and oil may go to the contractor or RRMF for reuse. Oil-filled and grease or oil-contacted equipment is not accepted at the KSC landfill. Non oil-filled equipment with >50 ppm PCBs on the painted surfaces may go to the KSC landfill for disposal. PCBs have been regularly detected in various building materials (such as paints, coatings, caulk, mastic, window glazing, etc.) across KSC and CCAFS. Construction and demolition debris that has not been tested for PCBs or has been found to contain PCBs >50 ppm will be accepted at the KSC landfill but must be managed according to PCB bulk product waste storage regulations until disposal in the landfill. This includes covering the materials and storing them on an impermeable surface for protection against precipitation and prevention of soil contamination. In addition to window caulking, paint coatings, and electrical equipment, transformer concrete pads and other surrounding materials may contain PCB contamination. To determine if surrounding media and/or surfaces to be disturbed/disposed of have been contaminated by past actions with oils containing PCBs, contact IHA Waste Management. They will determine the applicable regulatory requirements and guidance for the proper management of the waste PCB materials. Please follow the PWQ/TRP process for waste disposal. All concrete associated with oil-containing electrical equipment must be disposed through IHA Waste Management as regulated PCB waste. Contact IHA Waste Management Services at 867-8642 for assistance.

3.a.6. THREATENED AND ENDANGERED SPECIES: A Biological Survey and/or relocation activities (if required) must be performed prior to commencement of this project. The fence replacement portion of this project has the potential to impact the protected gopher tortoise. Measures must be taken to minimize impacts to tortoises and their habitat. Lighting and communication structures have consistently been used by nesting birds such as ospreys on KSC. Due to ospreys being protected under the Migratory Bird Treaty Act, and under Florida Administrative Code, their nesting habits on man-made structures has sometimes created impacts. Because of the ospreys' protection under Federal and State laws, disturbance of these nests while occupied with eggs and fledglings is illegal. Light poles and lightning towers must be surveyed for nesting birds prior to any corrosion control activity. Please contact Becky Bolt (867-7330) 14 days prior to beginning work in order to schedule biological surveys for tortoise burrows and nesting birds.

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3.a.7. CONCRETE WASHOUT: Water used to rinse out concrete trucks and other equipment used for concrete work must not be allowed to discharge to surface waters. Concrete washout water shall be diverted to a settling pond where suspended material will settle out and the water can percolate into the ground. Concrete residue shall then be removed and disposed of at the KSC Landfill. Call Doug Durham (TA-B1B, 867-8429) with any questions on this requirement.

3.a.8. RECYCLING: The contractor must make every practical effort to reclaim and segregate materials that have the ability to be recycled. All reclaimed concrete (see Item 3.a.9) must be segregated from other wastes and transported to the KSC Landfill (L7-0071) on Schwartz Road. All reclaimed scrap metal, not being recycled by contractor outside of KSC, must be transported to the Reutilization, Recycling and Marketing Facility (RRMF) with a KSC Form 7-49. Please turn these items and the KSC Form 7-49 into RRMF personnel to ensure the proper disposition of the materials prior to leaving the recycling area. For any other information regarding what materials can be recycled or other general information regarding recycling policies at KSC, please contact the Environmental Management Branch (Alice Smith, 867-8454 or Maggie Forbes, 867-3305).

3.a.9. CONCRETE RECYCLING/DISPOSAL: Clean, unstained, unpainted concrete is accepted at the Diverted Aggregate Reclamation and Collection Yard (DARCY) without any sampling and analysis. Painted concrete must have PCB and Total Metals analyses (limited to Pb, Cd, Cr) performed to determine whether it will be accepted at the DARCY for reuse. The results of the analysis must show metal concentrations below the residential cleanup level (Pb = 400 ppm, Cd = 82 ppm, Cr = 210 ppm) and PCB levels below 0.5ppm. If no testing is done or if PCB and/or Total Metals concentrations are above residential cleanup levels, coated concrete goes to the landfill as construction/demolition debris. When feasible, painted concrete should be segregated from unpainted concrete for placement in the DARCY. No oil-stained concrete will be accepted at the DARCY. Due to the potential for PCB contamination, all removed concrete associated with oil-containing electrical equipment must be disposed through the KSC Waste Management Office as regulated PCB waste.

3.a.10. GREEN PURCHASING/AFFIRMATIVE PROCUREMENT (AP): Federal agencies and their contractors are required to purchase energy and water efficient products, products made from recycled or recovered materials, biobased products, and other environmentally preferable products whenever possible. Detailed information on EPA approved products is available at <http://www.epa.gov/cpg>. A Request for Waiver Form (KSC 28-825 NS) must be submitted for the purchase of items that are on the Comprehensive Procurement Guidelines (CPG) list but were replaced with non AP approved items. Also, a list of bio-based preferred products is available at <http://www.biopreferred.gov/DesignationItemList.aspx>. Contact Alice Smith (867-8454) with any questions on this requirement.

3.a.11. TRANSFORMERS: The Kennedy Space Center Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) documents the procedures for the prevention, response, control, and reporting of spills of oil at KSC, Florida. If a new transformer using a volume of oil equal to or greater than 55 gallons is to be installed, it is subject to SPCC rules. For additional clarification of the SPCC rules and requirements, contact Tim Tyndall at 867-3659.

3.a.12. REFRIGERANT (HVAC Unit): Freon (Ozone Depleting Substance (ODS)) is a reportable substance under the Toxics Release Inventory (TRI) reporting requirements. If the new HVAC unit is replacing an existing unit, precautions must be taken to prevent any accidental release of refrigerant during the disassembly of existing system and draining of lines. Any releases should be reported to the NASA Environmental Assurance Branch (Hien Nguyen, 867-8455). Refrigerant must be recovered by a certified/trained competent person and unit labeled empty prior to delivery to the Reutilization, Recycling and Marketing Facility (RRMF) if the air conditioning unit is no longer usable. Usable equipment does not need to be drained but must be accompanied by certification that it is not leaking. A completed KSC Form 7-49 must be provided to the RRMF when the equipment is turned in.

3.a.13. EXTERIOR LIGHTING: The installation/modification of any exterior lighting system must be in compliance with requirements of the KSC Exterior Lighting Guidelines. When possible, the use of low pressure sodium lights must be implemented. Safety and hazardous operations can receive a waiver that allows for non low pressure sodium lighting. These requirements can be found on the EPB Web page at:
<http://environmental.ksc.nasa.gov/projects/documents/ExteriorLightingGuidelines.pdf>.

3.a.14. ASPHALT WASTE: All asphalt waste should be segregated from all other wastes generated, and transported to

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the KSC landfill on Schwartz road. This material can be recycled in the form of roadway stabilization within the landfill if not contaminated by other waste streams.

3.b.1. EXCAVATION PERMIT: A KSC Excavation Permit will be required for any digging proposed by this project. Please contact the Utility Locate/Excavation Permit Request Customer Helpline at 867-2406 for an underground utility scan and dig permit.

3.b.2. WATER RESOURCES PERMITTING (Domestic Wastewater): The proposed lift station pump and motor replacement will not require a permit for the alteration or installation of utilities to transport potable domestic wastewater. However, any work done will not jeopardize the health and safety of personnel due to effects of the construction/modification of the KSC potable water or wastewater system. Backflow preventers will be installed as required per KSC-STD-Z-0013 and standard engineering practice. The organization responsible for the work will ensure that best engineering practices, codes, specifications and standards are followed. Pressure and leak tests as well as disinfection are also required. Contact Doug Durham (867-8429) for permit requirement determination and if further assistance is needed.

This Record of Environmental Consideration (REC) does not relinquish the project lead from obtaining and complying with any other internal NASA permits or directives necessary to ensure all organizations potentially impacted by this project are notified and concur with the proposed project.

Due to potential changes in regulations, permit requirements and environmental conditions, statements in this REC are valid for 6 months and subject to review after this period. It is the responsibility of the project lead to notify the Environmental Management Branch (TA-B1C) if the scope of the project has changed since the original checklist was submitted.

Cc: K. Britton/TA-B3C
M. V. Le/TA-B3A
L. Ruffe/IHA-200
K. Herpich/IHA-200
J. Shaffer/TA-B1C
D. Hawkins/45 CES/CEAO

- 4 Upon evaluation of the subject project, the above determinations have been made and identified. Contact the Environmental Program Office (TA-B1C) at 867-8448 for re-evaluation should there be any modifications to the scope of work.**



9/10/2009 10:51:45 AM

Lynne Phillips

Date